

**INHIBITION OF ANGIOGENESIS BY HIGH MOLECULAR
WEIGHT KININOGEN AND PEPTIDE ANALOGS THEREOF**

Abstract of the Disclosure

5 Two-chain high molecular weight kininogen, and peptide
analogs thereof having homology to sites within kininogen domain 5, are
potent inhibitors of angiogenesis. The peptides have the formula X_1 -His-
Lys-X-Lys- X_2 wherein

X is any amino acid,

10 X_1 is from zero to twelve amino acids, more
preferably from zero to six amino acids, most preferably
from zero to three amino acids, and

X_2 is from zero to twelve amino acids, more
preferably from zero to six amino acids, most preferably
15 from zero to three amino acids.

X is preferably an amino acid having a nonpolar side chain, or a polar
side chain which is uncharged at pH 6.0 to 7.0. X is most preferably
Asn, Phe or His. Methods of inhibiting endothelial cell proliferation and
angiogenesis are provided.